

## GLIDER DESIGN PROJECT

Your task is to design and build a scale-model glider.

Designs will be judged on the basis of four criteria:

- The distance the glider can travel,  $D$
- The glider's time of flight,  $T$
- The product  $D \times T$
- The quantity  $D \times T \div M$ , where  $M$  is the mass of the glider (a measure of efficient use of materials)

### 1 DESIGN REQUIREMENTS

The glider must have a wing span of no more than 60 cm

The glider must be no more than 50 cm long

### 2 MATERIALS

Thick foam board	2 sheets ~33×8 cm
Thin foam board	2 sheets ~31×19.5 cm
A4 paper	4 sheets
Drinking straws	8
Tissue paper	1 sheet
Masking tape	
Adhesive	

### 3 EQUIPMENT

Scissors  
Stanley knife  
Steel ruler  
Sand paper  
Radius aids  
Bluetack (for centre of gravity adjustment)

### 4 PROJECT PROGRAMME

0.00 Introduction to Design Task  
0.10 Introduction to Glider Design  
0.30 Design Session  
0.45 Construction/Test Session  
1.55 Final Test Session  
2.10 Lunch